ABSTRACT OF THE DISCLOSURE

A semiconductor device having a first circuit block supplied with a first operating voltage, a second circuit block supplied with a second operating voltage, a voltage generating circuit for generating a third operating voltage in response to the first operating voltage, and a third circuit block supplied with the third operating voltage. Preferably, the third operating voltage is generated such that the first operating voltage is increased to a fourth operating voltage by a voltage-up converter, and then the fourth operating voltage is dropped to the third operating voltage by a voltage down-converter. Hence, a power supply operating internally stably in spite of use of a relatively fluctuating voltage can be provided even in the case where a power-supply voltage is dropped.